MODIS TECHNICAL TEAM MEETING

Sept. 12, 1996

The MODIS Technical Team Meeting was chaired by Vince Salomonson and Robert Murphy. Present were Harry Montgomery, Ed Masuoka, David Toll, Locke Stuart, Barb Conboy, Eric Vermote, Bruce Guenther, Bill Barnes, and Wayne Esaias.

1.0 SCHEDULE OF EVENTS

Oct. 8	MODIS Geolocation Workshop at GSFC
Oct. 8	MODIS Calibration Working Group at GSFC
Oct. 9 - 11	MODIS Science Team Meeting at GSFC

2.0 MINUTES OF THE MEETING

2.1 MCST Reports

Guenther said SWAMP, MODIS and the EOS AM Project Office should soon come to an agreement on instrument maneuvers. Salomonson said that maneuvers for the spacecraft for calibration purposes are clearly needed, especially the deep space maneuver that enables the bidirectional properties of the mirror to be periodically assessed. Guenther said the requested instrument maneuver requirements should be finalized soon in a special meeting.

Guenther recommends a "preliminary" test using an improved pre-launch procedure to test the scan angle versus response time to achieve a preflight accuracy from the current 5 percent to 1 percent. Further testing will be conducted after launch with greater accuracy.

Guenther reported preliminary studies using the intermediate filter assembly (IFA) indicate MODIS Band 26 (1.375 microns) may have an extended spectral bandpass of 3.4 nm to longer wavelengths (Attachment 1). Guenther said MCST and Kaufman think the change will cause only a small change to the S/N and should not significantly effect the utility of the products. Murphy said we should also pass information to Bo-Cai Gao to ensure his cirrus algorithm is not significantly affected.

In another preliminary study, Guenther reported that there is evidence of crosstalk between bands 5,6,7 and 26 (see Attachment 1). Montgomery said MCST will use additional lamps to further study crosstalk. Salomonson reported this is an ongoing study and MODIS scientists will continue to characterize when in orbit.

Guenther reported that MCST has received three of seven blocks of MODIS characterization testing from SBRS. MCST will send a representative to SBRS to retrieve the remaining four blocks next week. Guenther said that analysis of all seven blocks of data may not be completed by the MODIS Science Team Meeting.

2.2 Instrument Update

Murphy and Guenther reported there will be several subgroup meetings, including members of the MODIS Science Team, prior to the MODIS Science Team Meeting, Oct. 9-11, to study the current MODIS characterization results versus the related MODIS specifications. Salomonson said MODIS science elements should come to agreement as a group on recommendations for future instrument testing requirements with priorities clearly identified.

Barnes said the "Phase A MODIS Follow-on" study with Code 700 is scheduled to start in October. The MODIS Science Team will have a chance to review specifications since the Code 700 work in October is preliminary.

Barnes said EM electronic testing is near completion and the prototype electronics will be available in approximately two weeks for integration and testing. Most of the MODIS faulty resistors have been replaced and re-testing is ongoing. Barnes said there is no additional information about the EOS AM spacecraft faulty resistors.

Murphy quoted Weber as saying that many instrument testing issues will be resolved at the Quarterly Management Review meeting next week. Guenther and Murphy said that MODIS Science Team representatives will be closely involved in all decisions.

2.3 SDST Reports

Esaias said that ECS is providing the University of Miami with software and hardware to test MODIS ocean processing with Release A and B under their Test Bed Program. Murphy said that there are some concerns about the ECS-University of Miami plans, but that the work is proceeding. Masuoka reported that ECS accepted the MODIS position on providing data in their native format. The DAO products which are produced by data assimilation will, however, be in HDF-EOS format rather than the format of NMC forecast fields. Ocean products for Level 3 were implemented using the subordinate file feature in HDF which will not be supported in ECS Release B. Since this is the case, Bob Evans may output one science product per file for the Level 3 products. This has the advantage of keeping files 500 mb or smaller. The disadvantage is that this will increase the number of files generated per day by several thousand.

2.4 Science Team Reports

Murphy said all of the validation visuals have been submitted. Vermote said the validation plan for the aircraft data will be sent to Bill Bundy soon.

3.0 ACTION ITEMS

1. Guenther to work with Kaufman and Butler to coordinate MODIS inputs for maneuver requirements with SWAMP and EOS-AM Project.

4.0 ATTACHMENTS

1. Two charts showing Band 26 optical transmission; Band 26 with vapor transmission; and bands 5,6,7, and 26 SNR (Source: Guenther).